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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,630	01/16/2004	Christian Otto Boemmel	21334-1294	1211
29450	7590	04/18/2005	EXAMINER	
BARLEY SNYDER, LLC			HYEON, HAE M	
1000 WESTLAKES DRIVE, SUITE 275			ART UNIT	
BERWYN, PA 19312			PAPER NUMBER	

2839

DATE MAILED: 04/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/759,630

Applicant(s)

BOEMMEL ET AL.

Examiner

Hae M. Hyeon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11 and 17-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11 and 17-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/9/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of the invention Group II in the reply filed on March 28, 2005 is acknowledged.

Specification

2. The disclosure is objected to because of the following informalities: On page 10, line 17, "the mating connector 14" should be -- the mating connector 24 --.

Appropriate correction is required.

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

5. Claims 11 and 17-24 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: conductors and a ribbon cable.

According to the present specification, the ribbon receives a flexible printed circuit board between two part plates. Since claims 11 and 17-24 do not recite the flexible printed circuit board, the limitations such as contact openings recited in claim 19 and the receiving space recited in claim 20 are unclear. It is not clear how the contacts are structurally work with the contact

opening or what is being received in the receiving space. Also, how the two part plates form a connector when the claims only recite the structure of two part plates without any contacts, which are an essential part of a connector.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 11, 17-20, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narozny (4,067,637) in view of Deverrewaere (4,193,659).

Narozny discloses a continuous ribbon 20 configured to be severed to form a plurality of connector with a varying width, the ribbon 20 comprising two part plates 22 and 24. Two part plates 22 and 24 are latched to each other to form a connector with a receiving space 58 therebetween. Figures 6 and 7 show each plate having spacers on an internal face thereof which define a gap 58 between the two part plates. Figure 4 shows the lower plate 22 having an opening 40 for receiving a contact 42. Figure 14 shows two plates having two contacts opposite to each other. However, the two part plates of the ribbon 20 are not mutually connected by an integral flexible connecting piece. Instead, two part plates are latched to each other.

Deverrewaere discloses a connector 50 comprising two part plates 52 and 54 mutually connected by an integral flexible connecting piece 56 and 58, which are folded onto each other to form a connector with a receiving space therebetween. Deverrewaere teaches that the connector

50 provides a tight hold of a flexible printed circuit board within the connector 50. Also the connector 50 maintains a good electrical connection between the printed circuit board and pins of a mating connector by pressing the printed circuit board directly onto the pins.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the ribbon taught by Narozny such that it would have an integral flexible connecting piece to mutually connect the two part plates as taught by Deverrewaere because one of the plate pieces would not be misplaced easily since they are connected to each other and two plate pieces would provide a tight hold of a flexible printed circuit board between the two plate pieces.

8. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narozny and Deverrewaere as applied to claims 11, 17-20 and 23 above, and further in view of Strate (4,813,892).

Claims 21 and 22 recite that one part plate has a groove or a web on an external surface parallel to an insertion direction of the connector for providing a correct insertion position of the connector.

While Narozny and Deverrewaere do not disclose a groove or a web, Strate discloses a connector having a plurality of projections 5, 7 for a correct insertion position of the connector.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the connector taught by Narozny or Deverrewaere such that it would have a plurality of projections as taught by Strate because the projections would ensure the proper insertion position of the connector.

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9. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Narozny and Deverrewaere as applied to claims 11, 17-20 and 23 above, and further in view of Ortega et al (5,830,012).

Claim 24 recites that the ribbon is disposed on a reel, but Narozny does not disclose the ribbon 20 being disposed on a reel.

Ortega discloses a continuous electrical connectors strip disposed on a reel (see Fig. 11) for storage or transportation purpose.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to dispose the ribbon taught by Narozny on a reel as taught by Ortega because the reel provides easy storage or transportation.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 3,325,769 by Travis and US Patent No 4,717,360 by Czaja disclose a continuous connector.

US Patent No. 3,519,978 by Taormina et al., US Patent No. 3,641,482 by Bretting, and US Patent No. 4,225,205 by Sinclair et al. disclose a connector for from two part plates connected by an integral connecting piece at an edge of the plates.

US Patent No. 4,376,565 by Bird et al. discloses a connector having a plurality of alignment projections.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hae M. Hyeon whose telephone number is 571-272-2093. The examiner can normally be reached on Mon.-Fri. (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tulsidas C. Patel can be reached on (571) 272-2098. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hae M Hyeon
Primary Examiner
Art Unit 2839

hnh hnh

Hae Moon Hyeon